

Data Validation Checklist Semivolatile Organic Analyses

Project: 35TH Avenue Superfund Site
 Laboratory: TestAmerica - Savannah, GA¹
 Method: SW-846 8270D Low-Level (PAH)
 Matrix: Soil
 Reviewer: Karen Marie Trujillo
 Concurrence²: Martha Meyers-Lee

Project No: 15268508.20000
 Job ID.: 680-85785-4
 Associated Samples: Refer to **Attachment A** (Sample Summary)
 Samples Collected: 12/12/2012
 Date: 01/17/2013
 Date: 01/20/2013

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (≤7 and 14 days from collection to extraction for aqueous and solid samples, respectively; ≤40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.	✓				
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Were target analytes detected in equipment/rinsate blanks?		✓		PAHs were not detected during the analysis of rinsate blank 121112-RB-Shovel (680-85731-47).	

¹ All analytical work subcontracted to TestAmerica of Tallahassee, FL

² Independent technical reviewer

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
12. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.	✓			According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank (121112-RB-Shovel) was collected during the week of 12/10/12. The rinsate blank was analyzed for PAHs under Test America Job ID 680-85731-3.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?		✓			
15. Was precision deemed acceptable as defined by the project plans?			✓		
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? <ul style="list-style-type: none"> Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. An initial calibration is to be associated with each sample analysis. A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument. 	✓			<ul style="list-style-type: none"> Instrument ID: TSMC5973 Initial Calibration: 12/01/2012 ICV: 12/01/12 @ 14:59 CCV: 12/19/12 @ 10:31, 12/20/12 @ 20:14, & 12/22/12 @ 11:41 	
19. Were calibration results within laboratory/project specifications? <ul style="list-style-type: none"> ICAL (Criteria: ≤ 15 mean %RSD with no individual CCC %RSD ≤ 30 ($\leq 50\%$ for poor performers), OR $r \geq 0.995$, OR $r^2 \geq 0.99$, and RRF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> If %RSD > 15 ($> 50\%$ for poor performers), or $r < 0.995$, or $r^2 < 0.995$, then J-flag positive results and UJ-flag 		✓		ICV of 12/1/12 @ 14:59, instrument TSMC5973: Dibenz(a,h)anthracene %D @ -28.4 (Lab: ≤ 30 , Project: ≤ 20). J-Flag result in all samples	J

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
non-detects <ul style="list-style-type: none"> ○ If mean RRF <0.050 (<0.010 for poor performers), then J-flag positive results and R-flag non-detects • ICV and CCV (Criteria: $\leq 20\%D$ ($\leq 50\%$ for poor performers) and $RF \geq 0.050$ (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> ○ If $\%D > 20$ ($> 50\%$ for poor performers), then J-flag positive results and UJ-flag non-detects ○ If $RF < 0.050$ (<0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds 					
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when $\%R > \text{Upper Control Limit (UCL)}$ and J/R-flag results when $\%R < \text{Lower Control Limit (LCL)}$.	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects	✓				
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓			Prep Batch 98158: 680-85785-62 (CV0511CC-CS), MS/MSD	
25. Were MS/MSD recoveries within laboratory/project specifications? <i>Only QC results for project samples are evaluated.</i> <ul style="list-style-type: none"> • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If either MS or MSD recovery meets control limits, qualification of data is not warranted. • MS and MSD $\%R < 10$: J and R Flag positive and ND results, respectively • MS and MSD $\%R > 10$ and $< \text{LCL}$: J-Flag positive and UJ-flag non-detect results • MS and MSD $\%R > \text{UCL}$ (or 140): J-Flag positive results 		✓		CV0511CC -CS (680-85785-62): <ul style="list-style-type: none"> • Anthracene MS $\%R$ was 122 (33-100). Qualification of data is not required, because the MSD $\%R$ (65) fell within control limits • Benzo[a]anthracene MS $\%R$ was 180 (24-120). Qualification of data is not required, because the MSD $\%R$ (76) fell within control limits • Benzo[a]pyrene MS $\%R$ was 142 (19-138). Qualification of data is not required, because the MSD $\%R$ (72) fell within control limits • Benzo[b]fluoranthene MS $\%R$ was 167 (26-124). Qualification of data is not required, because the MSD $\%R$ (66) fell within control limits • Chrysene MS $\%R$ was 170 (26-121). Qualification of data is not required, because the MSD $\%R$ (68) fell within control limits • Fluoranthene MS $\%R$ was 265 (21-122). Qualification of data is not required, because the 	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
				MSD %R (88) fell within control limits • Phenanthrene MS %R was 233 (29-110). Qualification of data is not required, because the MSD %R (86) fell within control limits • Pyrene MS %R was 227 (19-129). Qualification of data is not required, because the MSD %R (87) fell within control limits	
26. Were laboratory criteria met for precision during the MS/MSD analysis? <i>Only QC results for project samples are evaluated.</i> <ul style="list-style-type: none"> If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If %RPD > UCL, J-flag positive result and UJ-flag non-detect result 		✓		CV0511CC -CS (680-85785-62): • Anthracene @54%RPD (≤33). J-Flag • Benzo[a]anthracene @53%RPD (≤39). J-Flag • Benzo[b]fluoranthene @44%RPD (≤34). J-Flag • Chrysene @51%RPD (≤33). J-Flag • Fluoranthene @57%RPD (≤37). J-Flag • Phenanthrene @66%RPD (≤36). J-Flag • Pyrene @53%RPD (≤37). J-Flag	J
27. Were surrogate recoveries within lab/project specifications? <ul style="list-style-type: none"> If %R for 1 Acid or BN surrogates <10, then J-flag positive and R-flag non-detect associated sample results If 2 or more Acid or BN %R >UCL, then J-flag positive results If 2 or more Acid or BN %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results If 2 or more Acid or BN , with 1 %R >UCL and 1 %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results 	✓				
28. Were internal standard (IS) results within lab/project specifications? <ul style="list-style-type: none"> If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results If retention time of sample's internal standard is not within 	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
30 seconds of the associated calibration standard, R-flag associated data. <ul style="list-style-type: none"> The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met. 					
29. Were lab comments included in report?	✓			Refer to Attachment B (Case Narrative)	
Comments: The data validation was conducted in accordance with the <i>Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1</i> (OTIE, October 2012). The data review process was modeled after the <i>USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review</i> (EPA, October 1999) and <i>USEPA CLP NFG for Low Concentration Organic Methods Data Review</i> (EPA, June 2001). Sample results have been qualified based on the results of the data review process (Attachment C). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.					

DV Flag Definitions:

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- R The sample results are unusable. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
- UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A
SAMPLE SUMMARY

Sample Summary

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85785-4
SDG: 68085785-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-85785-61	CV0511BB-CS	Solid	12/12/12 15:24	12/14/12 11:51
680-85785-62	CV0511CC-CS	Solid	12/12/12 15:25	12/14/12 11:51
680-85785-63	CV0511DD-CS	Solid	12/12/12 15:50	12/14/12 11:51
680-85785-64	CV0511EE-CS	Solid	12/12/12 15:55	12/14/12 11:51

ATTACHMENT B
CASE NARRATIVE

Case Narrative

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85785-4
SDG: 68085785-4

Job ID: 680-85785-4

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-85785-4

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 12/14/2012; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 5.2° C and 5.6° C.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL

Samples CV0511BB-CS (680-85785-61), CV0511CC-CS (680-85785-62), CV0511DD-CS (680-85785-63) and CV0511EE-CS (680-85785-64) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 12/19/2012 and analyzed on 12/20/2012 and 12/22/2012.

Sample CV0511DD-CS (680-85785-63)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Several analytes recovered outside the recovery criteria for the MS/MSD of sample CV0511CC-CSMS (680-85785-62) in batch 640-98210. Also several analytes exceeded the rpd limit for the MS/MSD of sample CV0511CC-CS (680-85785-62) in batch 640-98210.

Refer to the QC report for details.

ATTACHMENT C
QUALIFIED SAMPLE RESULTS

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85785-4
SDG: 68085785-4

Client Sample ID: CV0511BB-CS

Lab Sample ID: 680-85785-61

Date Collected: 12/12/12 15:24

Matrix: Solid

Date Received: 12/14/12 11:51

Percent Solids: 62.4

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	6.5	J	11	0.93	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Acenaphthylene	5.4	J	11	0.85	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Anthracene	17		11	1.1	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Benzo[a]anthracene	77		11	0.99	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Benzo[a]pyrene	93		11	1.1	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Benzo[b]fluoranthene	140		11	1.5	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Benzo[g,h,i]perylene	51		11	1.8	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Benzo[k]fluoranthene	52		11	1.0	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Chrysene	100		11	1.2	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Dibenz(a,h)anthracene	18	J	11	1.0	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Fluoranthene	150		11	0.96	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Fluorene	6.0	J	11	0.83	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Indeno[1,2,3-cd]pyrene	57		11	1.8	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
1-Methylnaphthalene	11		11	0.85	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
2-Methylnaphthalene	15		11	0.83	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Naphthalene	16		11	0.83	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Phenanthrene	84		11	0.70	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1
Pyrene	120		11	0.83	ug/Kg	☼	12/19/12 09:18	12/20/12 22:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	85		39 - 100	12/19/12 09:18	12/20/12 22:08	1

Client Sample ID: CV0511CC-CS

Lab Sample ID: 680-85785-62

Date Collected: 12/12/12 15:25

Matrix: Solid

Date Received: 12/14/12 11:51

Percent Solids: 72.0

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	8.7	J	9.1	0.78	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Acenaphthylene	6.1	J	9.1	0.72	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Anthracene	28	J	9.1	0.89	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Benzo[a]anthracene	130	J	9.1	0.84	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Benzo[a]pyrene	150		9.1	0.92	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Benzo[b]fluoranthene	210	J	9.1	1.3	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Benzo[g,h,i]perylene	78		9.1	1.5	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Benzo[k]fluoranthene	72		9.1	0.86	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Chrysene	150	J	9.1	1.0	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Dibenz(a,h)anthracene	26	J	9.1	0.88	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Fluoranthene	240	J	9.1	0.81	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Fluorene	8.3	J	9.1	0.70	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Indeno[1,2,3-cd]pyrene	86		9.1	1.5	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
1-Methylnaphthalene	9.0	J	9.1	0.72	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
2-Methylnaphthalene	11		9.1	0.70	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Naphthalene	11		9.1	0.70	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Phenanthrene	120	J	9.1	0.59	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1
Pyrene	190	J	9.1	0.70	ug/Kg	☼	12/19/12 09:18	12/20/12 21:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	81		39 - 100	12/19/12 09:18	12/20/12 21:49	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTTE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-85785-4
SDG: 68085785-4

Client Sample ID: CV0511DD-CS

Lab Sample ID: 680-85785-63

Date Collected: 12/12/12 15:50

Matrix: Solid

Date Received: 12/14/12 11:51

Percent Solids: 69.4

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	69		19	1.6	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Acenaphthylene	9.8	J	19	1.5	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Anthracene	190		19	1.9	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Benzo[a]anthracene	650		19	1.8	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Benzo[a]pyrene	610		19	1.9	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Benzo[b]fluoranthene	740		19	2.7	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Benzo[g,h,i]perylene	470		19	3.1	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Benzo[k]fluoranthene	290		19	1.8	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Chrysene	660		19	2.1	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Dibenz(a,h)anthracene	140	J	19	1.8	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Fluoranthene	1200		19	1.7	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Fluorene	60		19	1.5	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Indeno[1,2,3-cd]pyrene	460		19	3.1	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
1-Methylnaphthalene	18	J	19	1.5	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
2-Methylnaphthalene	23		19	1.5	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Naphthalene	20		19	1.5	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Phenanthrene	790		19	1.2	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Pyrene	1200		19	1.5	ug/Kg	☼	12/19/12 09:18	12/22/12 15:29	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		39 - 100				12/19/12 09:18	12/22/12 15:29	2

Client Sample ID: CV0511EE-CS

Lab Sample ID: 680-85785-64

Date Collected: 12/12/12 15:55

Matrix: Solid

Date Received: 12/14/12 11:51

Percent Solids: 66.9

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	14		9.9	0.85	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Acenaphthylene	11		9.9	0.78	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Anthracene	47		9.9	0.97	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Benzo[a]anthracene	240		9.9	0.91	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Benzo[a]pyrene	290		9.9	1.0	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Benzo[b]fluoranthene	410		9.9	1.4	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Benzo[g,h,i]perylene	140		9.9	1.6	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Benzo[k]fluoranthene	140		9.9	0.94	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Chrysene	270		9.9	1.1	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Dibenz(a,h)anthracene	45	J	9.9	0.96	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Fluoranthene	440		9.9	0.88	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Fluorene	13		9.9	0.77	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Indeno[1,2,3-cd]pyrene	160		9.9	1.6	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
1-Methylnaphthalene	10		9.9	0.78	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
2-Methylnaphthalene	13		9.9	0.77	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Naphthalene	13		9.9	0.77	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Phenanthrene	200		9.9	0.65	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Pyrene	380		9.9	0.77	ug/Kg	☼	12/19/12 09:18	12/20/12 22:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	76		39 - 100				12/19/12 09:18	12/20/12 22:47	1

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